

ABSTRACT

A CCD color solid-state image pickup device has a plurality of light-receiving sections arranged in an array on the surface of a semiconductor substrate, and a vertical transfer path by way of which signal electric charges stored in electric charge storage sections of the respective light-receiving sections are read and transferred to a horizontal transfer path. In the image pickup device, the electric charge storage section of each of the light-receiving sections has a plurality of electric charge storage layers which are provided in a depthwise direction of the semiconductor substrate with potential barriers interposed therebetween. Signal electric charges stored in the respective electric charge storage layers are read independently to the vertical transfer path...